AIR COMMAND AND STAFF COLLEGE

AIR UNIVERSITY

AIR UNIVERSITY RESEARCH PAPER ASYMMETRIC WARFARE - EXPOSING AMERICA'S WEAKNESSES

by

Bradley A. Kinneer, Major, USAF

A Research Report Submitted to the Faculty

In Partial Fulfillment of the Graduation Requirements

Advisor: Dr. Donald MacCuish

Maxwell Air Force Base, Alabama April 2003

Distribution A: Approved for public release; distribution unlimited.

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to completing and reviewing the collect this burden, to Washington Headquuld be aware that notwithstanding and DMB control number.	ion of information. Send commen arters Services, Directorate for In:	ts regarding this burden estimate formation Operations and Reports	or any other aspect of to s, 1215 Jefferson Davis	his collection of information, Highway, Suite 1204, Arlington
1. REPORT DATE APR 2003		2. REPORT TYPE		3. DATES COVERED 00-00-2003 to 00-00-2003	
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER	
Asymmetric Warfare - Exposing America's Weakness				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Air University,Air Command and Staff College,Maxwell AFB,AL,36112				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAIL Approved for publ	LABILITY STATEMENT ic release; distribut	ion unlimited			
13. SUPPLEMENTARY NO	OTES				
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	34	RESPONSIBLE FERSON

Report Documentation Page

Form Approved OMB No. 0704-0188

Disclaimer

The views expressed in this academic research paper are those of the author(s) and do not reflect the official policy or position of the US government or the Department of Defense. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.

Contents

	Page
DISCLAIMER	ii
PREFACE	4
A NIGHTMARE	6
GENERATIONS OF WAR	11
AMERICAN TARGETS	14
JUST OPEN YOUR EYES	22
HOMELAND DEFENSE	27
ENDNOTES	29
APPENDIX	31

Preface

"It appears that there is more fire and smoke enveloping the very top of the building, and the fire crews are descending on this area, it - it does not appear that there's any kind of an effort up there yet. Now remember - Oh, my God!"

- Don Dahler ABC News/Good Morning America, 9:05 A.M.

The morning of September 11, 2001 changed the face of America. Terrorism is no longer a word reserved for television broadcasters when describing events taking place halfway around the world. Watching the smoke billowing into the clear blue skies that September day Americans knew that we were on longer safe at home or at work. Terrorism had come to America. This abstract idea of killing innocent people which has always been associated with places with names like Lebanon, the Gaza Strip and Columbia was not just knocking at our door it had kicked it in taking thousands of people along with it. As we sat glued to our television sets, the fact that terrorists were no longer a foreign problem was repeated over and over by commentators and we watched the safety of our nation burn and fall as the buildings collapsed into a pile of rubble.

When the first plane hit the World Trade Center most of us assumed it was a tragic accident. Something terrible must have gone wrong. The plane must have veered off course due to a mechanical failure or pilot error, but when a second plane rammed the second tower right before our eyes, it was clear this was no accident. A choreographed

terrorist attack on the United States was underway and we were helpless to stop it. The vulnerabilities of America became clear to the world in those few moments.

As the smoke cleared and the rubble was cleaned up, it would be naive to think this was the last asymmetric attack that terrorists will inflict on America. We need to ask hard questions and be ready to make hard changes so we can maintain the very freedoms we hold so dear. How did these terrorists cause so much death and destruction within our borders? What made these buildings the targets of choice? In addition, could we have prevented it? The answer to the fist two are simple, they watched how we live in this land of the free and discovered our weaknesses. By exploring these areas, just like a terrorist would, we can expose major flaws in the way America conducts business and correct them before they are exploited by our enemies. I hope that this exercise will lead us to the answer the third question of how to prevent future attacks. We must never stop asking ourselves the hard questions so we can close the gates to terrorists without destroying our freedom for the sake of our children, our friends, our way of life.

Chapter 1

A Nightmare

"To kill Americans and their allies, both civil and military, is an individual duty of every Muslim who is able, in any country where this is possible, until the Aqsa Mosque [in Jerusalem] and the Haram Mosque [in Mecca] are freed from their grip and until their armies, shattered and broken-winged, depart from all the lands of Islam, incapable of threatening any Muslim."

--Osama Bin Laden, 1998.

Praise Allah! The day of redemption is finally here and we will show the world how weak the great Satan is. This is the day we make America cry in pain and tremble in fear for repressing our Arab brothers around the world and occupying our holy lands. It has taken years of planning to make this day possible. My band of martyrs is just one of many cells watching television right now waiting for the sign to go into action. Some of my brothers have been biding their time for years in sleeper cells prepositioning themselves while others have been training and gathering items to destroy America. Praise Allah! There it is! A car bomb just exploded killing those soft, rich, morning talk show media moguls live on TV for all to see. What a beautiful fireball! Look at them panic and run around like cockroaches as they show it repeatedly spreading the fear better than we ever could. The media is our best ally. Now everyone in the world will know war has come to America, they are weak, and we are strong.

My band will start at this pitiful border crossing in the Pacific Northwest. We shall overwhelm the guards with brutal force and kill them all. Osama taught us well. We will make sure to videotape the whole thing. Leaving it, as evidence, so the whole country can witness what we have done in the name of Allah and Osama Bin Laden. At the same time, cars full of explosives will pull to a stop in the middle of the busy Detroit-Windsor tunnel and the swamped Mexican border crossing near San Diego Ca. and will explode. These simultaneous attacks will make America wake up to the fact that no place is safe and we are everywhere. We will infect their country as they infect our holy lands.

Praise Allah! Fear will precede us and terror will follow as we roam through their country. This land of freedom where only a car and credit card is all you need to go anywhere you want. We shall hit their decadent shopping malls with gas, leave salmonella in the salad bars at their fast food places and drop off suicide bombers at schools and big attractions as we go. Think of them, living in fear as silent death attacks them where they shop, poisons kill them where they eat and shrapnel rips at the bodies of their children. They will no longer consider themselves superior and immune from the rest of the world's problems and will soon beg us to stop.

Roadblocks will paralyze the country as snipers from sleeper cells start randomly shooting at the infidels as they put fuel in their gas guzzling cars or go to the local supermarkets. However, these will not slow us down, because we all have fake identity cards that make us look like proper citizens. Just think of all the perfect targets the roadblocks create and the hysteria that will occur when bullets start hitting the cars trapped in long slow lines. People will abandon their precious vehicles and run away bringing whole cities to a grinding halt.

I am the chosen one, named the VIP by the great leader, because of the precious cargo I carry with me. The suicide bombings and shootings will scare these soft people and slow them down for a short time but we desire so much more. We want this amoral country to bend to our will, to stop corrupting our lands with their very presence and realize their depraved ways. Money is all they worship. They know no hunger. I will change all that using these small vials in my pocket. They hold the key to their downfall. The vials contain Foot and Mouth Disease, Avian Influenza and a powder called Karnal Blunt and they will devastate the American economy when I release them at the right places. Think of it, whole herds will perish, poultry will die by the millions and the great planes of wheat will hold nothing but sickness for anyone who eats it. The cost of food will skyrocket and no country will accept their contaminated products. Billions of dollars in trade will be lost and the market shelves will go bare. They will know hunger!

Just like after 9-11, the skies will be empty of planes because of the suicide bombers that will strike at the airports. They will wait in long lines in the terminals and martyr themselves when the crowds are densest. Other brothers, who are waiting at the end of runways, will start shooting the big metal birds out of the air using their own stinger missiles. Each group might only bring down one but when that happens at ten airports around the country, the planes will not fly again for a long time. Many companies will go bankrupt and thousands will be without jobs causing much unrest.

Our cell in the East will hit a nuclear power plant. By attacking in force they will overrun the poorly armed guards and damage the high tech equipment needed to keep the fuel rods cool. Even if they do little structural damage, it will cause more destruction than Chernobyl because the main reactor is not the target. The target is the spent fuel rod

storage building using a tanker truck full of explosives. By simply damaging some of the critical equipment the coolant water level will drop and boom! Just like that, thousands of infidels will die and hundreds of thousands more will have to flee their homes to avoid radiation poisoning. This flood of refugees will be will be nothing like this rich nation has ever seen and it will overwhelm surrounding cities and pit them against each other.

My brothers in the south, who have been hard at work for years poisoning those cruise ships, will infect them with lethal doses and spread out visiting all the theme parks. The same diseases they have learned how to spread while acting as workers on the ships will make the masses of sheep that pack into the decadent parks very sick. The Norwalk Virus will effect the very old and the young first. The sickness will spread as those infected travel home passing it to others as they go and stressing medical facilities to the breaking point.

The waterways will bring fear as well. Container ships owned by one company, flying under the flag of another and a crew from a third will explode when they reach the ports of Charleston and Norfolk or the refineries of Staten Island or Baytown Texas. One of these ships should have a nuclear bomb on board, hidden deep amongst the hundreds of containers that pack the ship. These bombs will kill many and close the ports causing untold damage to their economy. The ports that stay open all have snipers assigned to target dockworkers, tugboat drivers, and crane operators, killing some and spreading fear through the rest. America will be under attack on all fronts just as we learned how to do in the camps in Afghanistan. They will feel the fear and terror that comes with the knowledge that the seas that have for so long protected them now may hold the key to

their destruction.

The tape we leave behind will have our declaration of war against the great Satan demanding they leave the Muslim lands of the Middle East. I will read Osama Bin Laden's Ladenese Epistle and promise more attacks, worst than the great September massacre. Threats of planes of fire falling from the skies and winds of death sweeping in from the sea will keep the infidels busy chasing their tails. While we roam through the lands, blending into their great melting pot, poisoning their food, destroying their economy and making them beg for our demands.

We will take our time, because fear takes time to grab a hold and strangle a foe. We will choose our targets carefully for there are so many unprotected high value targets available. Some will be very simple but very physiological like the birds the trains and electrical power. Every vehicle we travel in has a bag of grain laced with insecticide in the trunk and we shall feed the birds as we go. The big flocks of pigeons, the ducks in the parks and the birds in the zoos along our paths will all soon mysteriously die. Trains will start crashing because the rails have been tampered with and isolated power line and cellular phone towers will crash to the ground disrupting service enough to make them all worry. Radio and TV communications will be our best allies. Every explosion, every attack, and every death will be reported spreading the fear across the land.

The falling towers of September were just a start. Our fallen brothers in Afghanistan will be avenged ten fold as we spread our hate throughout this land. They will go hungry, gas prices will soar and neighbors will fear neighbors. Cities will be unsafe, riots will occur and they will know the meaning of terror. The days of the superpower are numbered. Our Holy lands will soon be free from the infidels.

Chapter 2

Generations of War

Why would terrorists use asymmetric or fourth generation tactics to attack

America? We need to look at each generation of warfare and see how they fit into the
fanatic's possibility of success to answer this question. Those wishing to cause harm can
be a small faction, a radical group, a religious movement that feels suppressed or even a
nation state that wants to alter the status of the United States. Each of these groups desire
to win with minimal losses, so they contemplate their tactics very seriously and choose
the ones that will give them the biggest bang for the buck. Lets review each generation
of warfare, in order, and see how they might fit into the radicals' playbook.

Napoleon used first generation warfare on the battlefields of Europe. These were the times of large armies facing off against each other in straight lines on the battlefields then marching straight at each other in a war of attrition. In Major Lind's words, "First generation warfare reflects tactics of the era of the smoothbore musket, the tactics of line and column." This option is not available today in modern societies due to advanced weaponry and tactics. That is what led to the next generation of warfare.

"Second generation warfare was a response to the rifled musket, breechloaders, barbed wire, the machine gun, and indirect fire. Tactics were based on fire and maneuver, and they remained essentially linear." Europeans coming to the New World brought breechloaders, which enabled a few armed personnel in wooden forts to hold off

attacking natives. Fort designs gave the riflemen the greatest fields of fire providing for better security. The invention of barbed wire and the machine gun changed the way armies faced each other on the battlefield making the lining up in straight lines and marching at the enemy too devastating to attempt. These armaments can and will probably be used by any group attacking America but it is the linear tactics that posses the problem here. A small group aimed at manipulating America would not be able to put together enough people to challenge our army in a face-to-face confrontation. Most nation states have given up the use of linear tactics and moved on to the third generation of warfare.

The French established the Maginot line after WWI to defend against another German attack. The Blitzkrieg, an innovative maneuver tactic, employed by the Germans, avoided the heavily defended French line completely leading the world into the next generation of warfare. "Third generation warfare was also a response to the increase in battlefield firepower. However, the driving force was primarily ideas. Based on maneuver rather than attrition, third generation tactics were the first truly nonlinear tactics." This idea of avoiding the enemy's stronghold appeals to every war fighter but this phase still concentrates on attacking military targets. Terrorist groups can see the folly in targeting strictly military "hard" targets. Why waste men and valuable resources, striking at heavily defended areas protected by well-equipped and trained personnel? Especially when there are so many "soft" targets available, which are wide open, with little or no protection. These facts lead a the small group of radicals that have limited resources and personnel to look for the easiest way to achieved their desired results. They want to cause the most amount of damage with the least possible effort so rather

than attack hard targets they go for the soft ones no matter who they may hurt. Fourth

Generation or asymmetric warfare takes the war to the people because they are easy prey.

The first three generations of warfare concentrated on enemy military forces whereas "The Fourth has a goal of collapsing the enemy internally rather than physically destroying him. Targets will include such things as the population's support for the war and the enemy's culture." By taking the war to the people and generating unrest within a society a small group can make a large group do what they want. Fourth generation warfare is perfectly suited for terrorist organizations because they do not have to declare war upon the opponent and can strike where and when they want. All the planning, prepositioning forces and execution of an assault can be accomplished before the enemy realizes what is going on. Low risk high return. Training men to fly jets, have them infiltrate and gain access to airports, hijack aircraft and kill thousands of people was all done without involving the advanced military forces of a superpower. Fourth generation or asymmetric warfare has become the tactic of choice in today's world.

Chapter 3

American Targets

"To bend the enemy's will, one must put him in intolerable circumstances; and the best way to do that is to attack directly the defenseless population of his cities and great industrial centers. It is as sure as fate that, as long as such a direct method of attack exists, it will be used."

- Giulio Douhet

Why did the terrorists pick the World Trade Center and the Pentagon to attack and where was United flight 93 headed? It is probably safe to say that it was not because the World Trade Center was the tallest buildings in New York or because the Pentagon looked like a big bull's-eye from the air. They were chosen because they represent America's economic and military strength respectively. Although, considering the attacks came from the air this might have been a small factor because they would stand out. However, easy target identification was probably not the main reason for picking these targets. Terrorists go through some type of target selection process like any military organization. The western mindset does not understand how a group could attack a building full of innocent people, a city bus or a street side café because it goes against our cultural norms.

Terrorists will follow their own ideology to determine acceptable behavior and legitimacy of targets.⁶ They are searching for an end and are willing to go to extremes to make themselves know and get their point across. C. M. Drake developed a decision

matrix (fig.1, appendix), which outlines the steps a terrorist may go through when picking targets. It comes down to the basics of what target will get the most attention for their cause and make the enemy suffer the most, hence the World Trade Center for high loss of life and public attention and the pentagon, which is Americas symbol of military might. Instead of strictly looking for the military centers of gravity, like nation states do, terrorists will concentrate on things that will reap the most publicity and have the maximum affect on public opinion. The very freedoms we enjoy in the U.S. present terrorists with a plethora of soft targets.

Americans get up every morning and take for granted that certain conveniences will be there. Simple things like hot water for a shower, gas in their car, school buses for the kids and the morning news on television or radio are a given in today's modern society in our developed country. If these things start disappearing and the news turns tragic, people will get worried, then they will get scared, and soon they will get mad. Demands on local, state, and federal agencies for protection will grow and if that is not soon in coming public protests and vigilantism will follow. This will create the very unrest within our society that the terrorists hope will make the government cave into their demands. It is truly terrifying once you stop and analyze how many soft targets there is that a terrorist group could attack within our borders, most of which would cause a rippling effect throughout our everyday lives. We live in a free society and terrorists could pull the security blanket out from under us leading to mass hysteria, pockets of armed resistance and the collapse of our economy.

Widely publicized disturbances at border crossings all around the country will shock the populace immediately and cause instant fear about what is to follow. With

5,225 thousand miles of shared border with Canada, another 1,925 with Mexico, and 95,000 miles of shoreline⁷ the Border Patrol with just over 9500 guards are stretched thin. Swamped border crossings that handle thousands of cars a day overwhelm inspectors making these outposts vulnerable to attack. More than 20,000 vehicles a day traverse the mile-long Detroit-Windsor tunnel.⁸ The busy San Ysidro Port of Entry, near San Diego, CA supported the crossing of 13.8 million cars and 82 thousand buses in 2002 alone.⁹ A determined foe could easily target one of our 350 ports of entry but, they could also bypass them using forged or stolen identity cards and strike deep within our borders before we new they were here.

Freedom of movement is an aspect of everyday life that Americans hold dear.

That freedom was severely hampered in the Washington D.C. area for a three-week period starting October 2, 2002 when a pair of snipers killed 10 people and wounded 3 more. These attacks soon made the local, national, and international news for the entire world to see. A terrorist organization could easily assume that if only two snipers could cripple the nations' capital the effect of ten or twenty such snipers spread out across the country would be much greater, slowing traffic and frightening residents. By mimicking the tactics used by these snipers, sleeper cells or terrorists that have just entered our country could cause havoc with very little risk to themselves while panicking millions.

Fear is the product terrorists are aiming for and what better target than our children.

Another soft target America offers is the thousands of big yellow school buses that transport our children to school everyday. Besides sticking out as they drive down the road, when not in use they are parked in clusters all across the nation with little more than a chain-linked fence surrounding them for protection. A few bombs or cut brake

lines, which could all be done under cover of darkness would stop the buses cold and cost the public millions for added protection. Parents would drive their kids to school themselves or keep them home further straining the public school system. Demands for safeguards at bus lots and in the schools would overtax the already heavily burdened local police departments, which could cause states to call out the National Guard. This move would cost the states money that they can ill afford. If random snipers and our children's safety are not worrying enough, what would we do if the store shelves started going empty? Feeding our families is another luxury we take for granted in this country and it provides a tempting target.

Sabotaging our food supply would take far more time than detonating a bomb or sniping at people but the effects would last longer. Bioterrorism in the form of diseases and viruses do not have to be weaponized to be devastating. These pathogens just need to be collected and transported, which will make them the weapon of choice for a terrorist who can gain access to them. Avian Influenza collects in the feces of infected birds so it can easily be picked up on someone's shoes just by visiting an infected area and going for a walk. If this disease were introduced into the watering troughs at poultry farms, it would kill entire populations of chickens or turkeys. The estimated economic damage if such an attack occurred would be approximately be \$9 billion in disrupted trade and increased prices. That is relatively low compared to the estimated \$27 billion in lost trade and \$5.4 billion in increased supermarket prices if Foot-and-mouth disease were introduced into this country. Simply slipping an infected piece of cow tongue into the ventilation system of a feedlot would suffice. Our Grain belt is more susceptible than our livestock. Just the introduction of a small vial of karnal bunt into the wheat fields of

Kansas, Oklahoma and Texas would automatically destroy the wheat operations of those states overnight and we would no longer be able to export wheat. Agricultural exports are approximately \$140 billion annually and are responsible for about 13 percent of the gross domestic product and 17 percent of the employment in the United States. Here the numbers are staggering. The introduction of these pathogens into our food chain would not only damage our economy and cause our store shelves to go empty but world opinion of the US would suffer, as all of our exports would be suspect. Economic disaster and starving Americans would be a big hit in some parts of the world. The possibility of bringing about catastrophic change to America can lead terrorists to other possible target sets.

Causing whole communities to flee their homes in fear of an unseen threat would be the ultimate reward for a small terrorist group. There are 103 nuclear power plants around the country with serious security problems. A pole taken in September 2002 of nuclear power plant security guards "found that only one of four nuclear power plants are confident their plant could defeat a terrorist attack." Not only are these guards undermanned, under-trained, under-equipped, they are underpaid. At six nuclear facilities security guards were being paid \$1 to \$4 less per hour than custodians or janitors. How confident can we be that these men would stay and offer a sound resistance to a choreographed attack on their plant? Terrorists would not have to attack the main reactor complex, which is hardened for protection; they could aim for the spent-fuel storage pools. The cooling pools are critical and very vulnerable. Just damaging the controls to these pools might be enough to drain them, which could result in a fire and a radioactive release worse than the 1986 Chernobyl disaster that killed 8,000 and affected the lives of

over 7 million people.¹⁷ Nuclear power plants are considered hard targets because armed resistance could be expected. Terrorists would have to weigh the risk over the result to determine the possibility of attempting this type of attack. The cost would be a few dedicated followers and some explosives. The outcome may completely alter the face of America, rendering vast areas of the country uninhabitable for years to come.

Isolated pockets of terror could spread fear as well. Cruise ships have suffered a significant amount of illnesses in recent months. Over 1500 passengers have gotten sick and at least one has died. Although the Norwalk or Norwalk-like virus was identified as the main culprit another, more lethal virus, could easily be introduced into the closed environment of a cruise ship causing much illness and panic. This panic would not only occur on board but ashore as well in areas where an infected ship might dock. This type of attack would be a relatively easy to carry out because of the number of ports these ships visit allows for easy access, the crew is usually low paid internationals that can be bribed and paying passengers that are not thoroughly inspected. The seas, which have for so long protected America, may bring their own source of terror called container ships.

Each year, more than 7,500 commercial vessels make approximately 51,000 port calls, off-loading 6 million loaded marine containers in U.S. ports. Current growth predictions indicate the container cargo will quadruple in the next 20 years. ¹⁹ Currently only 2 percent of containers are inspected. ²⁰ These odds leave this avenue of insertion of bombs or other terrorist supplies wide open and well worth the risk. Detonating a container full of explosives, or even a dirty bomb, deep within a ship might not destroy a port but it will put everyone on guard and slow traffic down tremendously costing

millions of dollars. In addition, just by spreading the threat of a nuclear device, being smuggled on one of these ships could major delays or close ports completely.

The United States also has 57 oil terminals, which are vulnerable to possible attack. "Three oil-shipping facilities at Philadelphia; Corpus Christi, Texas; and Valdez, Alaska, were reported to be under surveillance by Islamist terrorists during the past several months." Authorities understand this weakness and it was brought to public attention in February 2003 with the explosion of a tanker at the ExxonMobil oil and gas storage facility on Staten Island. Americans watched as 100,000 barrels²² exploded and we all thought the worst. America's dependence on oil is well known throughout the world and the destruction of one or two terminals would raise oil prices directly affecting anyone driving a car or trying to heat their house. This type of attack on our critical infrastructure would dramatically increase public demand on the government for some type of protection. These factors place these terminals high on the terrorist hit list.

Spreading fear across the country by major strikes that would affect the whole country would be more costly than individual strikes that target local communities, but these minor incursions would bring the terror directly into our homes. It might take an entire cell to attack a nuclear power plant or a border patrol post and even though these incidents could result in great rewards, they could result in the complete loss of a cell. A terrorists group will choose targets based on the capabilities of each cell. Some groups may go for simple targets, such as an isolated high power line tower. This may only disrupt power in a local area for a short time by breaking the lines, but it will directly affect thousands of people and make the evening news achieving the terrorist desired affect. Other low/no risk operations that could have tremendous physiological effects

could include the removal of railroad rail supports or the bending of rails leading to train wreaks, or the spreading of infected seed to kill thousands of birds.²³ The metal birds that fly through our skies everyday are just as much at risk as the small ones with feathers.

If terrorists choose to asymmetrically attack our airline industry, the rippling effects would be devastating. The airlines, which are already in financial trouble, directly employ thousands of people and countless other businesses are dependant upon them. If bombs start going off in airports, before security checkpoints and jets start falling under attack from shoulder-fired missiles the public will stop fling. Airlines will go bankrupt resulting in dips in both the travel industry and tourism. Americans will not feel safe and stay close to home hording their dollars thus negatively affecting the economy. The main threat terrorists would face carrying out these types of attacks is the aware citizen that is willing to get involved.

Mass media would be the terrorists' best ally in his goal of spreading fear and molding public opinion across the country. News Channels would report current events as they happen and fill the time in-between attacks with expert speculation. These reports along with the droning on about what to do in case of an attack or what to do if you see any suspicious activity will increase public awareness while germinating the seed of fear amongst the population. All of this free airtime given to the terrorist will increase the effectiveness of each attack exponentially making the their job easier. Time will be on their side while the talking heads on television wonder where they will strike next they can wait and strike whenever and wherever they desire to achieve the desired affect.

Chapter 4

Just Open Your Eyes

"U.S. intelligence agencies have estimated that as many as 5,000 al Qaeda members may be operating inside the United States. Five Americans of Yemeni descent were arrested last week near Buffalo and charged with supporting a terrorist organization."²⁴

- Bill Gertz, Washington Times, 18 Sept 2002

How does a terrorist develop an attack plan for America? It is really a very simple process if you just open your eyes and think as they do for a moment. Once a group has decided to attack us and picked out what centers of gravity it wants to affect, economic, social or agricultural, they just need to choose a specific target and how to assault it. It does not take years of training at a terrorist camp in Afghanistan, or some other third world country that tolerates radicals willing to martyr themselves for their cause, to develop a target list. These fanatics can simply flip on a television, go on-line from anywhere in the world or visit the local library to gain the information they seek.

Television and movies provide not only endless hours of entertainment they are a wealth of ideas on what makes our culture tick and thereby what we hold dear providing fanatics with clues on where to strike next. "Given the public's fascination with television happenings like the O.J. Simpson trial, one can only imagine what might happen if future terrorists direct and produce their own television spectaculars." People might at first

think it was just creative entertainment in the league with H.G. Wells' "War of The Worlds" radio broadcast. Once they understood it to be real, they would sit glued to the TV and watch with dread. Millions of people have seen news items like the sniper shootings in the Virginia area and witnessed its effect on the nation. If they were paying attention to CNN on October 25, 2002, they not only heard about the capture of the sniper, they were provided with graphics on how the vehicle was modified to conceal the shooter. 26 Yes, a complete description of how to create your own undetectable sniper mobile was broadcast to the public. Not all dangerously crazy ideas come from inside this country. On February 18, 2003 a disturbed man with a milk carton full of gasoline set it on fire in a subway train in South Korea killing 198 people.²⁷ The need to know what happened to cause these incidents is ingrained in our society. However, by providing every detail of these events the possibility of copycats repeating the crimes increases. If two lone snipers can cripple a city for 3 weeks, what would 20 around the country do? In addition, ask yourself, how hard would it be to bring a carton full of gasoline onto a subway car in New York or Washington DC? These are but two examples of the many stories repeated time and again on the radio and TV around the country. The newspaper medium covers stories in explicit detail also and even the smallest stories can spark a terrifying reality.

While watching the 24-hour news networks a terrorist can also take the time to glance at a newspaper to gleam ideas for his next attack. Dirty bombs to make historical landmarks to dangerous to visit, crop dusters to spread anthrax, poisoned bait to kill birds are all right there in black and white for everyone to read. Ever wonder where you could pick up vials of plague? According to the Associated Press Texas Tech University has

180 vials of plague and a professor who cannot seem to account for all of them.²⁸ Are you interested in the poison Ricin, details on how to make this deadly poison are on page 5 of the daily Montgomery Advertiser.²⁹ Do you want to disrupt an inauguration of a new governor; there was a special section on scheduled events, all the preparations to include a detailed map with timeline for Governor Riley's 2003 inauguration.³⁰ There is a goldmine of useful information out there all for the price of the daily paper. If attacking a governor is beyond their capacity, there is always the article about the Los Angeles Zoo closing all of its aviaries and gathering up all of its free-roaming birds to prevent them from catching the Exotic Newcastle Disease.³¹ If that article is linked with the one about poisoned bait, which killed thousands of birds, a deranged mind could start visiting zoos, parks and downtown areas where birds flock to and simply feed the birds leaving the seeds of terror in his wake. Television and newspapers are full of information that could be misused but they pale in comparison to the damage a fanatic with a computer and modem can do.

The Internet is the super highway of the information age, which can lead us to ruin. Anything you can think up is out there floating around in this digital universe ready and waiting for someone to retrieve it. Today's search engines make it so easy to navigate you do not even need to know exactly what you are looking for when you start to search. A key word like homemade bombs, poison gases, or terrorist targets typed in to the search engine will deliver hundreds of web sites to your computer for you to choose from. Say the terrorist cannot decide what target to strike, he only has one good chance and he wants to do something that will go down in history. He could check out "Significant Terrorist Incidents, 1961-2001: A Chronology" available from the U.S. State

Department Bureau of Public Affairs.³² This list will provide them facts of what makes the news and what does not. If the radicals are not worried about going down in history but cannot think of anything to attack, they could just visit the web site www.disastermagizine.com. This site provides a list of terrorist targets, compiled by disaster magazine that combines similar lists from the Federal Bureau of Investigation (FBI), General Accounting Office (GAO), Federal Emergency Management Agency (FEMA) and other federal agencies listing targets. This list includes national infrastructure, high body count, specific high-value targets and most likely terrorists scenarios.³³ While this list does not provide any "inside information," it is full of ideas for the ambivalent terrorist.

All kinds of destructive information are available on the web today and the information is legal to obtain. In addition, the American Librarian Association will go to court to ensure your Constitutional rights to access it. Do you want to know how to build your own bomb or set a good trap? You can order your own copy of the Anarchist Cookbook from the web for the low price of \$14.95.³⁴ In addition, do not forget your free bonus, a copy of "The Terrorist's Handbook" which is full of ideas for the confused terrorist! It is all right if you do not have an address or the credit card to order from, just keep looking. Soon you will come across a sight called "Mercury's Depths" which is listed under fireworks. This site does have a disclaimer stating that it does not support terrorism right next to hot links to pages with detailed instructions on how to build such items as: napalm fire bombs, tennis ball bombs, contact grenades and disk bombs. The disk bomb for example, is a small 3.5 floppy disk that is rigged to ignite when placed into a computer, simple yet effective. Moreover, it is free for the downloading. If this is not

enough to worry you, there is more. According to the Israel: news agency the terrorist group Hamas posted a Chemical and Gas Terror Weapons Manual on their web page until international outcry made them pull it off.³⁶ This manual was a recipe book complete with pictures and notes on how best to employ the weapons (fig 2, appendix). The possibilities are endless and if the terrorist does not have his own computer, the library or local Internet café is always available.

The library itself is a wealth of information. Countless books on the subject of terrorism, fourth generation and asymmetric warfare have flooded the shelves because that is what is hot in the world today. There are many good books focusing on the threat of what may happen and how to do it. Books like *Living Terrors* by Michael Osterholm and John Swartz explains the most likely scenario for a Bioterrorism attack and *Terrorists' Target Selection* by C.J.M. Drake, which I have already sited in this paper, are also often available locally. Another good source of explicit detailed information comes from published congressional reports of testimony from terrorist experts who really understand and want to impress upon our leaders the disastrous possibilities that exist. Granted the bookshelves are not as full as the Internet or as prolific as the news networks are but it is still a resource than can be exploited.

Chapter 5

Homeland Defense

Defeating an asymmetric threat during wartime, when fighting a known enemy is tough but doing it during peacetime, against and undeclared foe is almost impossible. When a terrorist uses deception by blending into the crowd, surprise by hiding a bomb under his coat, and brutality by lacing the shrapnel used with rat poison, there is not much a fully loaded F-16 can do to stop him. However, if a terrorist organization is identified early military assets can be employed to prevent a suicide bomber from ever getting that far. The 2002 National Security Strategy states that, "We will disrupt and destroy terrorist organizations by: defending the United States, the American people, and our interests at home and abroad by identifying and destroying the threat before it reaches our borders." Officially the war on terrorism has been waging for over a year and airpower has played a significant role in deterring hostile terrorists from perpetrating further attacks on the US. Nevertheless, the focus cannot only be placed on preemption; a strong internal defense needs to be in place as well.

Northern Command (NORTHCOM) stood up on 1 October 2002 as the Department of Defense's (DOD) answer to the call of protecting the homeland.

NORTHCOM's homeland defense mission is directed against military threats emanating from outside the United States. NORTHCOM can also provide support to lead federal

agencies when directed by DOD.³⁸ While working with The Department of Homeland Defense (DHD), it can closely interact with the agency allowing for a synergistic effect protecting our country. For example, advanced radar warning systems linked with surveillance aircraft such as the Predator, one of our Unmanned Aerial Vehicles (UAV), could soon be helping the border patrol enforce the "Smart Border" Declaration that was signed with Canada in December of 2001.³⁹ Sharing information quickly and accurately and, most importantly, at the right level will be key factor in the success of these organizations.

Combat air patrols like the ones flown over New York and Washington DC, aeromedical evacuations which are done daily, and airborne humanitarian relief are but a few
of the roles The United States Air Force can be called upon to perform in a time of crisis.

Currently civil authorities must step through a quagmire of red tape to secure these
services. Hopefully the synergistic effects of Northern Command and The Department of
Homeland Defense working together can prevent the need for reaction to an attack on our
homeland by being proactive and preventing them. We need to keep working on the goal
of pushing the security of the United States out away from our borders by taking the
offensive and using the full force of the military and intelligence agencies to keep
terrorist organizations on the run. We may never be able to completely deter the lone
suicide bomber or rouge band of terrorists that may attack our country. Nevertheless, by
increasing the awareness level amongst the public, of what terrorists can do and the
tactics they may employ, every citizen can become a watchdog in the fight to keep
America safe.

¹ Bin Laden, Osama. "Jihad Against Jews and Crusaders: World Islamic Front Statement." Washington Post 23 February 1998. On-line. Internet, 21 Sept 1998.

² Lind, William, et al. "The Changing Face of War: Into the Fourth Generation." *Marine Corps Gazette*, October 1989, 22-26.

³ Ibid. page. 23

⁴ Ibid. page. 23

⁵ Ibid. page. 24

⁶ Drake, C.J.M. "Terrorists' Target Selection," New York N.Y.: St. Martin's Press, Inc., 1998. "The touchstone of a group's initial decisions about target selection is provided by the group's ideology. This is because the ideology lays down the initial parameters of what can be deemed acceptable behavior by the terrorists and also enables those people who are deemed to be legitimate targets." Pg. 175

⁷ Department of Homeland Security web page, 28 February 2003, On-line, Internet. Available from http://www.dhs.gov/dhspublic/display?theme=50

⁸ Patricia Zacharias, "The Building of the Detroit-Windsor tunnel." *The Detroit News*, On-line. Internet, 10 February 2003, available from http://www.detnews.com/histroy/windsortunnel/windsortunnel.htm.

⁹ San Ysidro Chamber of Commerce Border Crossing 28 February 2003, On-line, Internet. Available from http://www.sanysidrochamber.org/border.html

¹⁰ Jeannie Meserve et.al. "Ballistics Match rifle to Sniper Attacks." *CNN.com*, On-line. Internet, 27 January 2003, available from http://www.cnn.com/2002/US/South/10/24/sniper.shootings/

¹¹ US Senate. Agricultural Biological Weapons Threat to the United States: Hearing before the Subcommittee on Armed Services. 106th Cong., 1st Sess., 1999 pg 35 Oct 27, 1999

¹² Ibid. page 35

¹³ Ibid. page 26

¹⁴ Ibid. page 26

¹⁵ "Nuclear Power Plant Security: Voices from Inside the Fences 12 September 2002." 30 January 2003. On-line, Internet. Available from http://www.pogo.org/p/environment/eo-020901-nukepower.html page 1 ¹⁶ Ibid. page 2.

¹⁷ Miguel Lianos. "U.S. Tightens Nuclear Plant Security." *MSNBC News*. 30 January 2003. On-line, Internet. Available from http://www.msnbc.com/news/697180.asp?cpl=1 page 4.

¹⁸ "Princess Cruise Hit By Virus" 5 February 2003, CBS news On-line, Internet. Available from http://www.cbsnews.com/stories/2002/11/20/health/main530128.shtml.

Dave Eberhart, "Container Ships – The Next Terrorist Weapon?" *NewsMax.* 15 April, 2002. On-line, Internet. Available from http://www.newsmax.com/archives/articles/2002/4/14/151335.shtml.

Did Ibid.

²¹ Bill Gertz. "U.S. Sees Terrorism Threat Against Country's Oil Ports." Washington Times. 13 November 2002. On-line, Internet. Available from http://ebird.dtic.mil/Nov2002/e20021113ussees.htm.

²² Brooke A. Masters, "Explosion Rocks Staten Island Oil Facility." Washington Post. 21 February 2003. On-line. Internet. 10 March 2003. Available from http://www.washingtonpost.com/ac2/wp-dyn?pagename=article&node=&contentId=A41213-2003Feb21¬Found=true.

The Associated Press. "Poisoned Bait Kills as many as 2,000 Birds." *Montgomery Advertiser*. 24 January 2003. Page 5A. White, Georgia – Someone intentionally laced corn with insecticide killing up to 2,000 hawks, doves, ducks, geese and other birds within a half-mile radius of a north Georgia farm.

²⁴ Bill Gertz, "Terror Cells At Liberty To Strike." *Washington Times*, On-line. Internet 18 September 2002. available from http://ebird.dtic.mil/Sep2002e20020918terror.htm.

²⁵ Sloan, Stephen. "Terrorism: How Vulnerable is the United States." In *Terrorism: National Security Policy and the Home Front*, Edited by Stephen Pelletiere. The Strategic Studies Institute of the U.S. Army War College, May 1995. On-line. Internet, available from

http://www.homelandsecurity.com/modules.php?op=modload&name=News&file=article&sid=5665

26 Jeannie Meserve et.al. "Ballistics Match rifle to Sniper Attacks." *CNN.com*, On-line. Internet, 27 January 2003, available from http://www.cnn.com/2002/US/South/10/24/sniper.shootings

²⁷ "South Korean Subway Fire Death Toll Hits 182." LatelineNews Seoul, South Korea, On-line. Internet, 25 February 2003 available from http://latelinenews.com/ll/english/1248468.shtml

²⁸ Betsy Blaney, "Professor Arrested in Vials Case." The Associated Press. *Montgomery Advertise*. 16 January 2003 page 4A.

³⁰ Inauguration 2003, Special Section. *Montgomery Advertiser*. 19 January 2003 12 pages.

³² "Significant Terrorist Incidents, 1961-2001: A Chronology." U.S. Department of State Office of the historian Bureau of Public Affairs 31 October 2001. On-line Internet, 29 September 2002. Available from http://www.fas.org/irp/threat/terror_chron.html

³³ Ashcroft, John. "Terrorist Targets" *Disaster Magazine*, 2001, On-line Internet, 29 August 2002. Available from http://www.disastermagizine.com/Features/Terrorist% 20 Aftermath/terrorist_targets.htm. List of Targets that include National Infrastructure Targets, High Body Count Targets, Specific High-Value Targets and Most Likely Terrorists Scenarios.

³⁴ Anarchist Cookbook order form. On-line Internet, 20 January 2003. available from http://www.licensed4fun.com/anarchist1.htm Order your own copy of the from this site and get your free bonus!! A copy of "The Terrorist's Handbook." Provides details on how to build a dozen different bombs, pick locks and counterfeit money.
³⁵ "Mercury's Depths" web site On-line Internet, 19 January 2003. available from

³⁵ "Mercury's Depths" web site On-line Internet, 19 January 2003. available from http://www.geocities.com/losthacker21/hq.html Homemade bombs, fireworks and explosives! Everything you ever wanted to know...this web site gives detailed instructions on how to make everything from a Tennis Ball Bomb to Napalm.

³⁶ Web site "Hamas Chemical and Gas Terror Weapons Manual Posted on the Internet" 1 January 2003. available from http://www.israelnewsagency.com/terrorismchemicalgasweapons.html. provides examples of page with recipe book for Cyanides and Hydrogen Sulfide Gas complete with pictures and notes how to best employ them.

³⁷ The National Security Strategy of the United States of America, September 2002. Page 6.

³⁸ U.S. Northern Command web page, On-line, Internet, 5 Mach 2003, available from http://www.northcom.mil/index.cfm?fuseaction=s.whoweare§ion=11

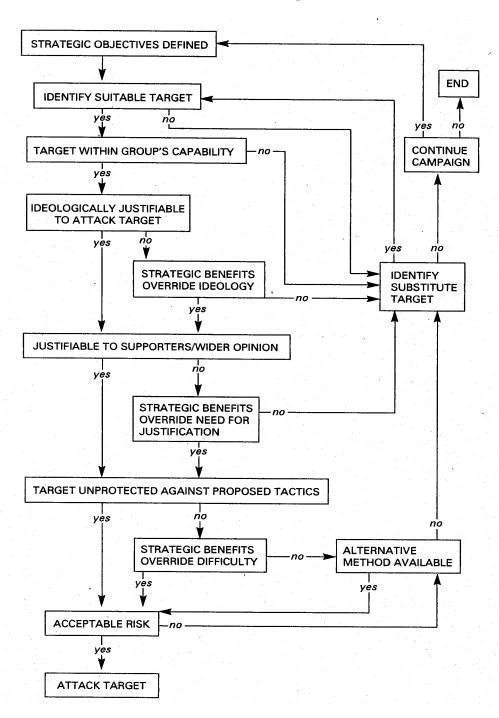
³⁹ Summery of the Smart Border Action Plan Status. Office of the Press Secretary 9 September 200. On-line. Internet, available from http://www.whitehouse.gov/news/releases/2002/09/print/20020909.html A 30-point action plan established to enhance the security of our shared border while facilitating the legitimate flow of people and goods with Canada.

²⁹ Curt Anderson, "Federal Agency Gives Details About Poison." The Associated Press. *Montgomery Advertiser*. 11 January 2003 page 5A.

³¹ The Associated Press, "Zoo Shuts Away Birds to Help Avoid Disease." *Montgomery Advertise*. 4 January 2003 page 4A. The Los Angeles Zoo closed all of its aviaries and gathering up all of its freeroaming birds to prevent them from catching the Exotic Newcastle Disease, which is spreading California's \$3 billion poultry industry. Similar precautions were taken earlier this week to protect birds at the San Diego Zoo and San Diego Wild Animal Park.

APPENDIX

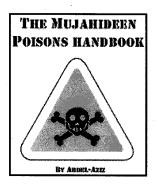
Process of Terrorist Target Selection



C. J. M. Drake Terrorists' Target Selection

figure 1

HAMAS CHEMICAL AND GAS TERROR WEAPONS MANUAL POSTED ON INTERNET



THIS INFORMATION WAS EXPOSED AND COMMUNICATED BY THE ISRAEL DEFENSE FORCES

Manual For Poisons and Chemical Gases Published on Hamas Website

Jerusalem-----January 2........A manual published on the official Hamas Website, titled: "The Mujahadeen Poisons Handbook," has been discovered, which is a manual for preparing poisonous materials to use in a terrorist attack.

This document is further evidence of Hamas' use of the Internet as a means of assistance in its efforts to carry out terrorist attacks. In fact, Fatah operative Walid Mahamud Hasham el-Ara, has been indicted in an Israeli military court in Gaza for using the Internet to collect information on how to produce biological weapons.

See IDF Website article about the indictment

The 23-page manual, written by Abdel-Aziz in 1996, details for Islamic terrorists how to prepare various homemade poisons, chemical poisons, poisonous gases and other deadly materials for use in terrorist attacks against Israelis, Westerners, and anyone else who stands in the way of an Islamic Jihad.

Introduction

Aziz begins the manual with an introduction that blesses those on Islamic Jihad. He quotes the Prophet Muhammad, "you will conquer Constantinople and Rome."

*Editor's note: A well-known religious document cites the Prophet Muhammad, who was asked about Muslim victories, and which city would be conquered first - Constantinople or Rome. Muhammad answered Constantinople would be conquered first.

It is believed that the conquest of Rome will mark Islam's return to Europe, as it is considered the seat of Christianity.

http://www.israelnewsagency.com/terorismchemicalgasweapons.html

figure 2a

Recipe Book

Below are two examples of instructions provided in the manual. Please note that the information provided below is purposely incomplete, so that it cannot actually be used.

Name: Potassium Cyanide Chemical Name: KCN

Appearance: Deliquescent crystalline salt Lethal Dose: *****

Time to Death: 3-4 minutes

Preparations:

- 1. Add **gm of ***** found in printing shops to 3 gm of **** or 3 gm of *****, and grind them both together in a beaker.
- 2. Heat: until it turns black
 3. Put about **ml of ***** into the beaker and mix. Allow the mixture to cool.
 4. Filter. The KCN is dissolved in the water.

5. To obtain the powder form, evaporate the water.

Precautions:

Even though neither ***** nor ***** is poisonous, you MUST wear gloves and a gas mask during preparation and handling of cyanides. Do not touch it even with a gloved hand. Inhalation of its odor will lead to headaches, dizziness, fever and stomach pain. If by mistake it touches the mouth, give huge amounts of water and induce vomiting. Keep away from acid.

Notes:

... it is notorious as an intensely powerful poison. By mouth, by injection or by skin. KCN is the most powerful chemical poison. If using skin penetration, you must dissolve in olive oil as it will penetrate the skin and hide the smell to some extent. KCN can also be use in most face creams - especially ***** - for easy skin penetration.

Hydrogen Sulfide Gas

Chemical Formula: H2S

Odor: Feces/bad eggs. Odorless in large quantities

Preparation: 2:5 Solution 5g ***** + ***** NB: Good quality ***** should have a strong smell

Notes: This gas is better than HCN because it destroys the breathing system rather than simply stopping it. Death in 30 seconds.

Using Gases Two bottles, each containing one of the reactants, are strapped together and flung at the target area.

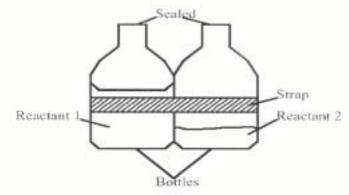


Figure 6: Using gases

http://www.israelnewsagency.com/terorismchemicalgasweapons.html

figure 2b